

CLAIM AMENDMENTS

1    Claim 1 (original): A method for simultaneously planarizing to relatively equal smoothness a  
2    thin film magnetic head hardbaked resist structure having relatively low surface energy and one  
3    or more additional thin film magnetic head structures containing other materials of comparatively  
4    higher surface energy, said method comprising the steps of:

5                preparing a chemical mechanical polishing (CMP) slurry targeted at equaling the rate of  
6    removal of said hardbaked resist structure having relatively low surface energy and said one or  
7    more additional structures containing other materials of comparatively higher surface energy;  
8                said CMP slurry including a liquid vehicle containing an oxidant and a complexing agent,  
9    an abrasive, and a surfactant; and

10               applying said CMP slurry to the surface of said structures and simultaneously planarizing  
11    said structures using a CMP planarization technique.

1    Claim 2 (original): A method in accordance with Claim 1 wherein said other materials include  
2    copper, alumina and NiFe.

1    Claim 3 (original): A method in accordance with Claim 1 wherein said surfactant comprises a  
2    non-ionic surfactant.

1    Claim 4 (original): A method in accordance with Claim 1 wherein said surfactant comprises  
2    octylphenoxyethoxyethanol.

1 Claim 5 (original): A method in accordance with Claim 1 wherein said abrasive comprises silica.

1 Claim 6 (original): A method in accordance with Claim 1 wherein said liquid vehicle comprises  
2 water, said oxidant and said complexing agent.

1 Claim 7 (original): A method in accordance with Claim 1 wherein said oxidant comprises  
2 persulfate.

1 Claim 8 (original): A method in accordance with Claim 1 wherein said complexing agent  
2 comprises ammonium.

1 Claim 9 (original): A method in accordance with Claim 1 wherein said oxidant and said  
2 complexing agent comprise ammonium persulfate.

1 Claim 10 (original): A method in accordance with Claim 1 wherein said slurry comprises about  
2 0.01-1.0 % (by volume) of said surfactant.

1 Claim 11 (original): A method in accordance with Claim 1 wherein said slurry comprises at least  
2 about 0.2 % (by volume) of said surfactant.

1 Claim 12 (original): A method in accordance with Claim 1 wherein said slurry comprises about  
2 0.5 % (by volume) of said surfactant.

1 Claim 13 (original): A method in accordance with Claim 1 wherein said slurry comprises an  
2 aqueous liquid vehicle containing about 6-12 % (by volume) of said abrasive, about 1.5-3  
3 grams/liter ammonium persulfate, and about 0.02- 1.0 % (by volume) of said surfactant.

1 Claim 14 (original): A method in accordance with Claim 1 wherein said slurry comprises an  
2 aqueous liquid vehicle containing about 6-12 % (by volume) of said abrasive, about 1.5-3  
3 grams/liter ammonium persulfate, and at least about 0.2 % (by volume) of said surfactant.

1 Claim 15 (original): A method in accordance with Claim 1 wherein said slurry comprises an  
2 aqueous liquid vehicle containing about 6-12 % (by volume) of said abrasive, about 1.5-3  
3 grams/liter ammonium persulfate, and about 0.5 % (by volume) of said surfactant.

1 Claim 16 (original): A method for fabricating a thin film magnetic write head, comprising the  
2 steps of:  
3 forming one or more thin film layers that comprise a hardbaked resist structure having  
4 relatively low surface energy and one or more additional structures containing other materials  
5 having comparatively higher surface energy;  
6 simultaneously planarizing said structures using a chemical mechanical polishing  
7 planarization technique and CMP slurry targeted at equaling the rate of removal of said  
8 hardbaked resist structure having relatively low surface energy and said one or more additional  
9 structures containing other materials of comparatively higher surface energy; and  
10 said CMP slurry including a liquid vehicle, an abrasive, and a surfactant.

1   **Claim 17 (original): A method in accordance with Claim 16 wherein said other materials include**  
2   **copper, alumina and NiFe.**

1   **Claim 18 (original): A method in accordance with Claim 16 wherein said surfactant comprises a**  
2   **non-ionic surfactant.**

1   **Claim 19 (original): A method in accordance with Claim 16 wherein said surfactant comprises**  
2   **octylphenoxypolyethoxyethanol.**

1   **Claim 20 (original): A method in accordance with Claim 16 wherein said abrasive comprises**  
2   **silica.**

1   **Claim 21 (original): A method in accordance with Claim 16 wherein said liquid vehicle**  
2   **comprises water, said oxidant and said complexing agent.**

1   **Claim 22 (original): A method in accordance with Claim 16 wherein said oxidant comprises**  
2   **persulfate.**

1   **Claim 23 (original): A method in accordance with Claim 16 wherein said complexing agent**  
2   **comprises ammonium.**

- 1 Claim 24 (original): A method in accordance with Claim 16 wherein said oxidant and said
- 2 complexing agent comprise ammonium persulfate.
  
- 1 Claim 25 (original): A method in accordance with Claim 16 wherein said slurry comprises about
- 2 0.01-1.0 % (by volume) of said surfactant.
  
- 1 Claim 26 (original): A method in accordance with Claim 16 wherein said slurry comprises at
- 2 least about 0.2 % (by volume) of said surfactant.
  
- 1 Claim 27 (original): A method in accordance with Claim 16 wherein said slurry comprises about
- 2 0.5 % (by volume) of said surfactant.
  
- 1 Claim 28 (original): A method in accordance with Claim 16 wherein said slurry comprises an
- 2 aqueous liquid vehicle containing about 6-12 % (by volume) of said abrasive, about 1.5-3
- 3 grams/liter ammonium persulfate diluted in water, and about 0.02 -1.0 % (by volume) of said
- 4 surfactant.
  
- 1 Claim 29 (original): A method in accordance with Claim 16 wherein said slurry comprises an
- 2 aqueous liquid vehicle containing about 6-12 % (by volume) of said abrasive, about 1.5-3
- 3 grams/liter ammonium persulfate, and at least about 0.2 % (by volume) of said surfactant.

1 Claim 30 (original): A method in accordance with Claim 16 wherein said slurry comprises an  
2 aqueous liquid vehicle containing about 6-12 % (by volume) of said abrasive, about 1.5-3  
3 grams/liter ammonium persulfate, and about 0.5 % (by volume) of said surfactant.

1 Claim 31 (currently amended): In a disk drive having a housing, a rotatable magnetic recording  
2 medium in the housing, an actuator carrying an actuator arm, a suspension, and a read/write head  
3 disposed in adjacent relationship with the recording medium, an improved magnetic write head  
4 having a hardbaked resist structure and one or more additional structures containing other  
5 materials having comparatively higher surface energy, said structures ~~being~~ having a  
6 substantially even surface profile as a result of being simultaneously planarized according to a  
7 planarization process comprising:

8 preparing a chemical mechanical polishing (CMP) slurry targeted at equaling the rate of  
9 removal of said hardbaked resist structure and said one or more additional structures containing  
10 other materials of comparatively higher surface energy;

11 said CMP slurry including a liquid vehicle containing an oxidant and a complexing agent,  
12 an abrasive, and a surfactant; and

13 applying said CMP slurry to the surface of said structures and simultaneously planarizing  
14 said structures using a CMP planarization technique.

1 Claim 32 (currently amended): A disk drive in accordance with ~~Claim 29-Claim 31~~ wherein said  
2 slurry comprises an aqueous liquid vehicle containing about 6-12 % (by volume) of said

3 abrasive, about 1.5-3 grams/liter ammonium persulfate, and about 0.02-1.0 % (by volume) of  
4 said surfactant.